

REMARKS

Claims 1 to 23 were pending in the present application when last examined. Applicant has amended claims 1, 3 to 5, 7, 10 to 12, 14 to 17, and 19 to 22, canceled claims 3, 6, 8, 9, 13, 19, 23, and added claims 24 to 29. Claims 1, 2, 4, 5, 7, 10 to 12, 14 to 18, 22, and 24 to 29 remain pending in the present application.

§ 103 Rejections

Claims 1 to 6, 8 to 11, 17 to 21, and 23

The Examiner rejected claims 1 to 6, 8 to 11, 17 to 21, and 23 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,326,948 (“Kobachi et al.”).

Claims 1 to 6 and 8 to 11

Addressing claim 1, the Examiner cited photodiodes PD1 to PD4 as the recited sensor that takes successive images of an active surface of a captive disk. Specifically, the Examiner found that “the reflected light is imaged by the photodiodes PD1 to PD4, therefore it is taking successive images of the active surface.” October 6, 2006 Office Action, pp. 2 and 3.

Applicant has amended claim 1 to further clarify the claimed invention. Amended claim 1 now recites a sensor that “is adapted to take successive images of the active surface of said captive disc and compare the successive images to determine movement of said captive disc.” Claim 1 (emphasis added). Kobachi et al. does not disclose comparing successive images of a captive disc to determine movement of the captive disc. Instead, Kobachi et al. discloses comparing current values of photodiodes PD1 to PD4 with each other at each moment to determine movement 1. See col. 8, line 65 to col. 9, line 40; Figs. 7A, 7B, and 8. This is similar to comparing the values of four adjacent pixels in each image instead of comparing the values of corresponding pixels in successive images as recited in amended claim 1. Thus, amended claim 1 is patentable over Kobachi et al.

Claims 2, 4, 5, 10, and 11 depend from amended claim 1 and are patentable for at least the same reasons as amended claim 1. In addition, amended claims 4 and 5 are further patentable over Kobachi et al. for the following reasons.

Applicant has amended claim 4 to recite an “active surface [that] has a convex shape so a border area is out of focus of said sensor when said captive disk is in the focal plane,” which is not disclosed by Kobachi et al. Amended claim 4. In contrast, Kobachi et al. discloses a flat or

concave reflective plate 3. Accordingly, amended claim 4 is further patentable over Kobachi et al.

Applicant has amended claim 5 to recite an “active surface compris[ing] a navigation area and a border area generally surrounding said navigation area; and said sensor ... suppresses any movement determined from the border area,” which is not disclosed by Kobachi et al. As described in the Detailed Description, this allows a captive disc to return to a rest position without a sensor detecting the return movement as motion of the captive disk. See paragraph [0040] and Fig. 2D. Thus, amended claim 5 is patentable over Kobachi et al.

Applicant has canceled claims 3, 6, 8, and 9, thereby rendering their rejections moot.

Claims 17 to 21 and 23

Applicant has amended claim 17 to recite similar limitations as amended claim 1. Accordingly, amended claim 17 is patentable for at least the same reasons as amended claim 1.

Claims 18, 20, 21 depend from amended claim 17 and are patentable for at least the same reasons as amended claim 17. In addition, amended claims 20 and 21 recite similar limitations as amended claims 4 and 5 and are further patentable for at least the same reasons as amended claims 4 and 5.

Applicant has canceled claims 19 and 23, thereby rendering their rejections moot.

Claims 7, 12 to 16, and 22

The Examiner rejected claims 7, 12 to 16, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Kobachi et al. in view of U.S. Patent No. 5,801,681 (“Sayag”).

Claim 7

Claim 7 depends from amended claim 1 and is patentable for at least the same reasons as amended claim 1.

Claims 12 to 16

Applicant has amended claim 12 with similar limitations as amended claim 1. Accordingly, amended claim 12 is patentable for at least the same reasons as amended claim 1.

Claims 14 to 16 depend from amended claim 12 and are patentable for at least the same reasons as amended claim 12. In addition, amended claims 14 and 15 recite similar limitations as amended claims 4 and 5 and are further patentable for at least the same reasons as amended claims 4 and 5.

Applicant has canceled claim 13, thereby rendering its rejection moot.

Claim 22

Claim 22 depends from amended claim 17 and is patentable for at least the same reasons as amended claim 17.

New Claims

New claims 24 and 25 depend from amended claim 1 and are patentable for at least the same reason as amended claim 1. In addition, claim 24 is further patentable for the following reasons.

New claim 24 recites a “sensor [that] does not determine the movement of said captive disk when said captive disk is released from the focal plane so that the active surface becomes out of focus for said sensor,” which is not disclosed by the cited references. Claim 24. As described in the Detailed Description, this allows a captive disc to return to a rest position without a sensor detecting the return movement as motion of the captive disk. See paragraph [0038] and Fig. 2E. Thus, new claim 24 is patentable over the cited references.

New claims 26 and 27 depend from amended claim 12 and are patentable for at least the same reason as amended claim 12. In addition, claim 26 recites similar limitations as claim 24 and is further patentable for at least the same reasons as claim 24.

New claims 28 and 29 depend from amended claim 17 and are patentable for at least the same reason as amended claim 17. In addition, claim 28 recites similar limitations as claim 24 and is further patentable for at least the same reasons as claim 24.

Summary

In summary, claims 1 to 23 were pending in the above-identified application. Applicant has amended claims 1, 3 to 5, 7, 10 to 12, 14 to 17, and 19 to 22, canceled claims 3, 6, 8, 9, 13, 19, 23, and added claims 24 to 29. For the above reasons, Applicant respectfully requests the Examiner to withdraw the claim rejections and allow claims 1, 2, 4, 5, 7, 10 to 12, 14 to 18, 22, and 24 to 29. Should the Examiner have any questions, please call the undersigned at (408) 382-0480x206.

Respectfully submitted,

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